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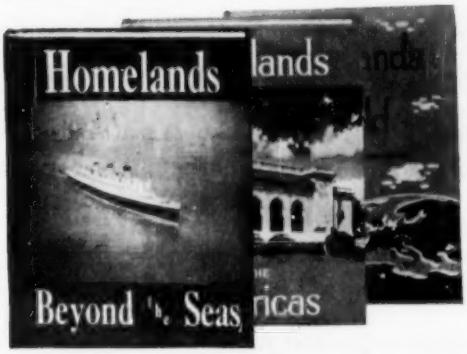

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OVERSEAS TRADE ON THE GREAT LAKES—ST. LAWRENCE WATERWAY

VILLA B. SMITH
John Hay High School
Cleveland, Ohio

Overseas trade on the Great Lakes is not something new. Foreign vessels have made regular calls at lake ports since the early 1930's. They have carried on trade far more important than tonnage indicates. They have brought a variety of commodities to lake ports and have provided midwestern shippers a direct contact with overseas markets. They have furnished a cheap, direct and convenient means of foreign transport.

SHIPS ADJUSTED TO THE ST. LAWRENCE

The ships engaged in this overseas trade have of necessity been small. They have had to meet the conditions imposed by the St. Lawrence waterway between Lake Ontario and Montreal. In this 182 mile stretch the river drops 225 feet. The antiquated locks and shallow canals around the various rapids and falls have limited the size of vessels. As a consequence, ships 258 feet in length, with a 43 foot 6 inch beam and a draft of 14 feet are the largest that can be accommodated. They carry a 1400 ton cargo into the lakes and need 33 hours to negotiate the waters between Montreal and Lake Ontario. They carry 2600 tons and draw 26 feet of water as far as Montreal. At this port the load is lightened for passage into the lakes. On the outbound trip cargo is taken on at Montreal to increase draft for the ocean-crossing.

The vessels engaged in the overseas trade are modern. Approximately half have been built within the past five years. Most are Diesel powered, using fuel oil stored in their double bottoms. Their speed is 13-14 knots an hour. They have four hatches with double storage holds. Cargoes are handled by cranes. The crews are 27-30 men (Fig. 1).

Hatch and crane facilities offer problems. The dimensions of shipments accepted are limited by the size of the hatch; the weight, by the size of the cranes available. Such limitations, however, affect only a small part of the overseas shipping. The small vessels are adequate carriers for a great and ever increasing variety of cargo.

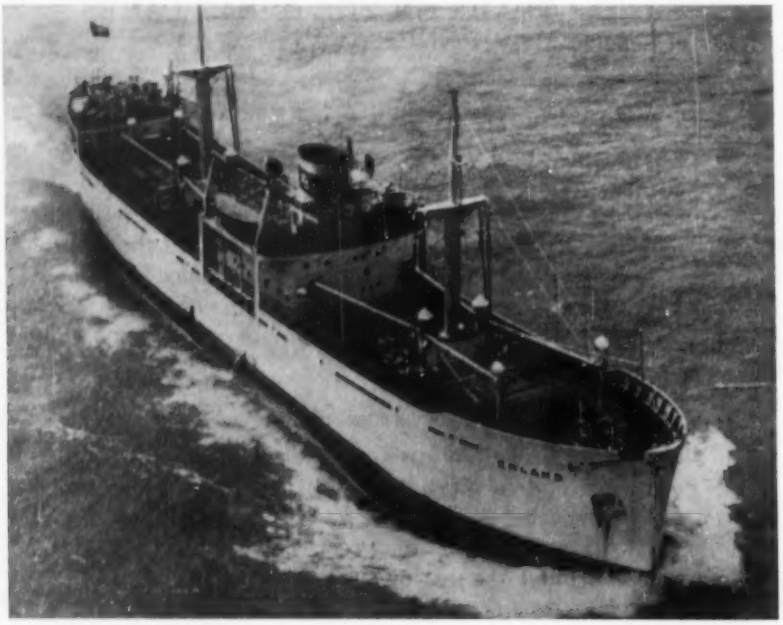

FIG. 1. The Erland, a ship of the Swedish American Line, passing under the Ambassador Bridge at Detroit. Ships such as this, average three trips into the Great Lakes each season. (Courtesy of Swedish American Line)

ECONOMICAL OPERATION

To be operated economically, the small vessels must make a maximum number of trips each season. They must not delay entering the lakes in the spring and must not stay too long in the fall. The season of navigation is limited and uncertain. As a rule, vessels arrive in late April and are out of the lakes by late November. In that period many of them make three round trips, a few make four.

Economical operation also calls for winter operations when the Great Lakes and St. Lawrence are closed. The small vessels are

well adapted to the Mediterranean trade. Many are able to make two round trips in this trade each winter. They carry manufactured goods from north European ports and return with fruit cargoes from the eastern Mediterranean. A few ships engage in winter trade with the open port of Halifax in Nova Scotia. Others engage in the Cuban sugar trade.

LINES IN THE OVERSEAS TRADE

The Great Lakes foreign shipping was initiated in 1936 by the Norwegian Fjell Line. Prior to that date, foreign vessels were occasional visitors at lake ports. They were tramps and often remained on the lakes for the season, engaging in trade between American and Canadian ports. It was following World War II that overseas shipping started its phenomenal growth. In 1945 one Norwegian vessel visited the lakes. Today, 13 lines with some 119 vessels are engaged in the overseas trade. The trade is largely European. A few lines serve Middle America, providing regular trans-Caribbean service.

Three of the lines, the Norwegian Fjell, the Swedish-American, the Dutch Oranje, resumed operations on the lakes in 1946. In 1949 they were joined by the Swedish-Chicago Line. In 1951, the French Fabre and the Hamburg-Chicago Lines began operations. In 1952, the Manchester Liners Ltd. of Great Britain operated two vessels into Lake Ontario. In 1953 the Constantine Line of Britain had two ships in the lakes trade. That year the Canuk Line of Canada had two vessels in the trade; the Cuban-American Line, four; Metron Line, three; West Line, one; Ahlmann-Transcaribbean Line, two. The latter is German owned and provides service between lake ports and the ports of LaGuaira, Porto Cabello and Maracaibo in Venezuela. In 1954 five West German shipping companies joined for general cargo service between European, North American and Great Lakes ports. They operate nine vessels and offer two services: (1) once a week from Hamburg to Montreal, Toronto, Detroit, Milwaukee and Chicago (2) every two weeks to Newfoundland, Quebec, Hamilton, Buffalo, Cleveland and Detroit.

LINE AND TRAMP SERVICES

Lines provide regular sailings. Their schedules enable shippers to contract for space for definite dates of departure and assure definite dates for delivery. This is in marked contrast with the

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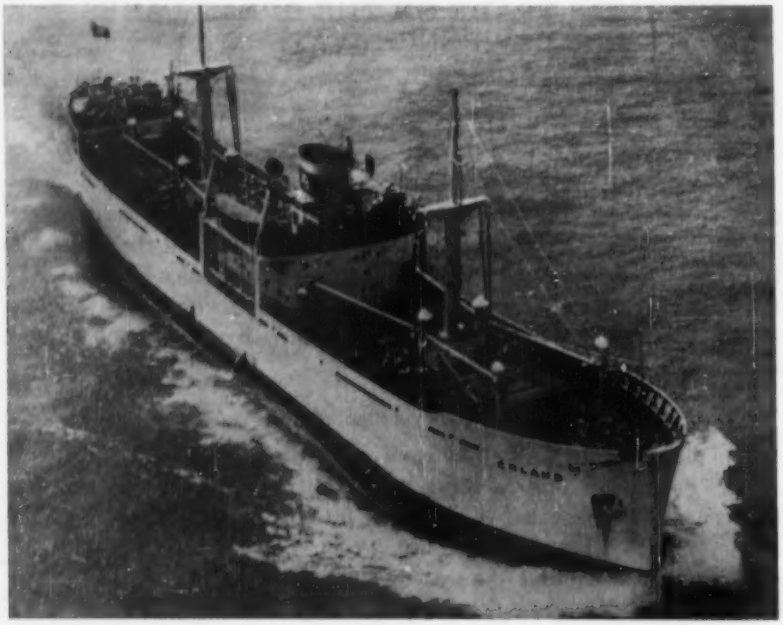

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LINE AND TRAMP SERVICES

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unscheduled service of tramps. Tramps, however, have their place in lake shipping. The demands of the trade determine the number of such vessels that come into the lakes. Fifty-three entered the lakes on one or more trips during 1953. Only seventeen engaged in such trade in 1952. That year ten of the tramps were Norwegian, the remainder flew the flags of Germany, Sweden, Finland and Great Britain.

The commodities carried by tramps vary. Wood pulp, paper, clay, sugar and steel are usual. Frequently, these shipments are delivered to the smaller ports on the lakes where local industries have need for the imported materials. Wood pulp and paper are important commodities delivered to Green Bay, Wisconsin, and to South Haven and Port Huron, Michigan. Other commodities such as clays and earths are delivered to Sheboygan, Wisconsin, and raw hides and skins to Muskegon, Michigan. There is no set pattern as to what tramps carry on their outbound trip. It depends on the cargo available. It may be grain or scrap metal, synthetic rubber or the like. Tramps do not carry general cargo.

For the year 1950, the Lake Carriers' Association reported 44 vessels in the foreign trade with an aggregate of 95 trips. These vessels flew the flags of Norway, Sweden, the Netherlands, Germany, Iceland and Finland. The Association also reported the Prins Willem Van Oranje of the Oranje Line as the first vessel into the lakes that season, passing Port Colborne on April 25. The Norwegian tramp, Lillgunvor, was reported as the last from the lakes, passing into Lake Ontario on November 24. During the 1950 season, the Fjell Line made 32 round trips, the Oranje Line 18, the Swedish-American 14 and the Swedish-Chicago 11. In contrast, the 1953 season found 119 vessels in the foreign trade with an aggregate of 268 trips. The season opened on April 17th when two upbound vessels, the Prins Frederik Hendrik of the Oranje Line and the G. Sartori of the Hamburg-Chicago Line passed Port Colborne. It closed on December 2d with the passing of the Norwegian tramp, Kye (Fig. 2).

Great Lakes Ports

The industrial cities of Cleveland, Toledo, Detroit, Milwaukee and Chicago are important loading and unloading ports for overseas shipping. They receive a variety of products: aluminum ore, concentrates and scrap; pig iron, sponge iron, iron and steel manu-

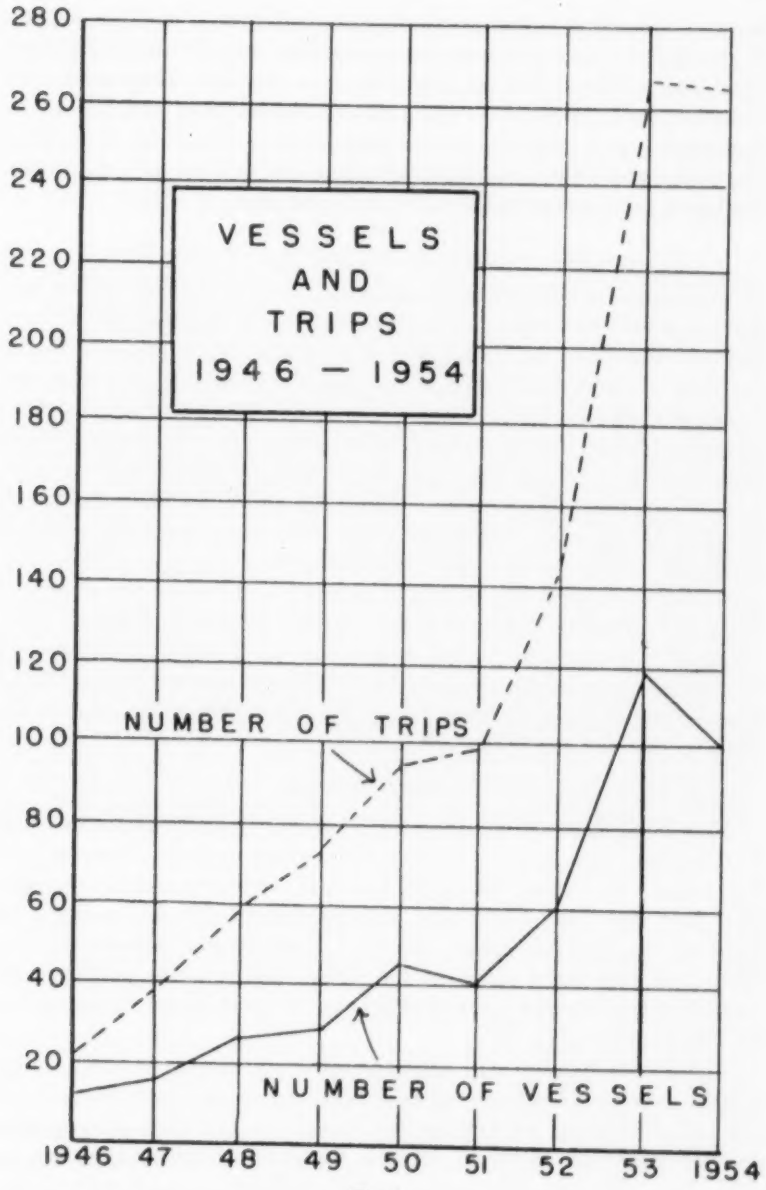
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FIG. 2

factures; distilled spirits, malt liquors and wines; inedible vegetable products; oil seeds and vegetable oils; wood pulp and paper; clays and earths; coal tar products and the like. They ship such manufactured products as construction, excavating and conveying machinery; automobiles, trucks and busses; electrical machinery and apparatus; also such agricultural commodities as grain, meat products, lard, prepared breakfast foods, etc.

Advantages of Shipping via the All-Water Route

The midwest shipper saves at least 10 to 20 per cent on freight charges which he would pay if shipments went by rail to New York City and thence by sea. The lake shipment is direct and eliminates the fees of east coast transshipping, warehousing and dockage. Frequently the all-water shipments require less crating, and there is less breakage. Breakage is an item in shipping whiskey, beer and wine. In order to avoid the damage attending transshipment in New York an increasing amount of alcoholic goods is being delivered direct to lake ports. Chicago receives the largest part of these imports, and serves as an important center for their distribution.

Chicago shippers are within 23 days of London via the all-water route. Cleveland is within 19 days. Actual time for delivery is about the same via water as by rail to the east coast and thence by sea. By way of east coast ports up to ten days are needed for rail haul, transshipment and loading. Delays may extend the time even further.

Overseas Services

The Fjell Line offers two services, the Scandinavian and the Continental. The former serves Copenhagen, Oslo, Bergen and Stavanger; the latter, Glasgow, London, Antwerp and Rotterdam. This line provides Cleveland approximately 19 day service to London, the time including stops at Toronto and Montreal. The Fjell Line had eight ships in the Great Lakes trade in 1952 and made 26 trips into the lakes that season. In 1953 it had 12 vessels in the lakes trade (Fig. 3).

The Swedish-American Line operated six vessels in 1952, seven in 1953. It serves the ports of LaHavre, Antwerp, Rotterdam, Bremen and Hamburg, as well as the Danish port of Copenhagen and the Scandinavian ports of Malmö, Göteborg, Norrköping, Stockholm, Oslo, Bergen, Stavanger and Trondheim. It also serves the

Finnish port of Helsinki and the Polish port of Gdansk (Danzig). Vessels of this line made 19 trips into the lakes in 1952. They brought considerable paper and wood pulp to American ports, also wines and beer, glass and china.

The Swedish-Chicago Line has regular service to Stockholm, Göteborg, Malmö, and Copenhagen. It operates five vessels into the Great Lakes. Its MS Fredborg late in the 1952 season carried

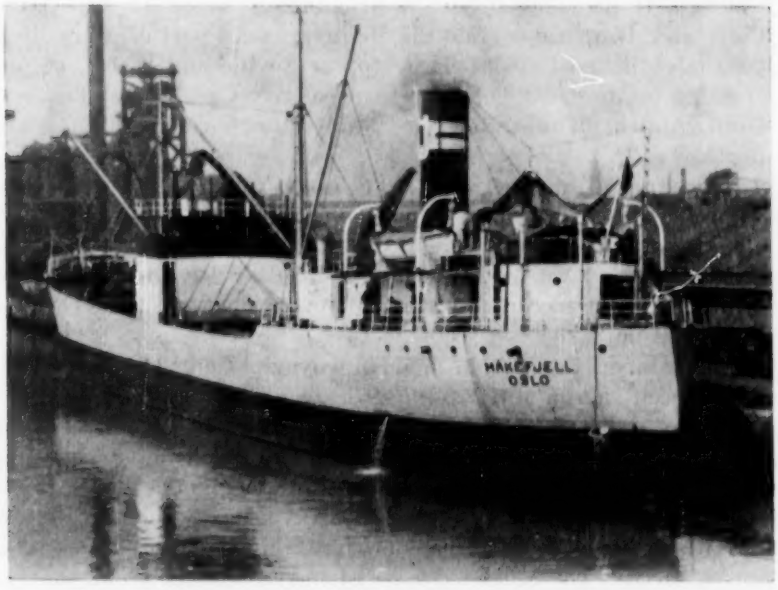

FIG. 3. The Makefjell of the Fjell Line loading pig iron at Cleveland, Ohio.

a shipment of Cleveland trenching equipment for use on a reclamation project in Finland. During the 1952 season 14 trips were made into the lakes by ships of this line.

The Oranje Line serves Rotterdam, Hamburg, Antwerp, La-Havre and occasionally Bremen. It operated seven ships into the lakes during 1952 and made 22 trips that season. Early in 1954 the Prins Willem George Frederick of this line made its first trip into the lakes. It is a new vessel with refrigerated storage holds. It brought Cleveland a large cargo of frozen meat—Dutch hams, sausage, bacon and fish.

The Hamburg-Chicago Line operated seven ships during 1952 and made 18 trips into the lakes. This German line provides regular service to Antwerp, Rotterdam, Bremen and Hamburg. It has delivered to Cleveland such items as Black Forest clocks, Christmas tree ornaments, toys, sewing machines, chinaware, earthenware, crockery, leather goods, artificial flowers, coal tar products, machinery, tools, steel and German sports cars (Fig. 4).

The Fabre Line serves Cleveland, Detroit, Milwaukee and Chicago. It provides service approximately every 12 days from Cleveland. It operates from the Mediterranean port of Marseilles. On the outbound trip its ships stop at Seville and Lisbon before crossing to Montreal. On the return passage Casablanca, Tangier, Oran, Algiers, Tunis, Palermo, Naples, Leghorn and Genoa are ports of call.

The Fabre Line operated eight vessels in 1952. Seven of these were chartered Norwegian tonnage, one was Swedish. These vessels made a total of 20 trips during the 1952 season. In January 1953, the Joliette and Marquette were placed in service. These were the first ships of French registry and the most modern of the foreign vessels on the lakes.

The Marquette, on her maiden voyage, made Cleveland her first port of call on May 23, 1953. She was followed on June 10 by the Joliette. These vessels brought miscellaneous products from Italy, North Africa, Spain and Portugal. Among these shipments were wines, cherries in brine, walnuts, leather goods, musical instruments, dolls, statuary and marble. Invoices of other cargoes in this Mediterranean trade include wines, olives, cherries, peppers, garlic, anchovy paste, canned fish and vegetables, macaroni, cheese, ceramics, glassware, alabaster, statuary, Italian marble, etc. These ships carry back a mixed cargo, loading at Cleveland such things as machinery, trucks, petroleum products, chemicals and paints.

Special Cargoes

As has been indicated, diversity characterizes the cargoes carried. Mixed cargoes are the rule, with commodities ranging from small to large. Some commodities are seasonal, for example, tulip bulbs. Since World War II, the bulb cargoes have steadily increased. The first are received about Labor Day and the last in late October. The first are for dry sales, that is, over the counter in the many shops selling bulbs. The later shipments are generally for

Fig. 4. The Prins Willem IV of the Oranje Line, the Desdemona of the Hamburg-Chicago Line and the Fredborg Vestervik of the Swedish-Chicago Line at the Riverfront Terminal, Cleveland, Ohio. (Courtesy Cleveland Plain Dealer Pictorial Magazine, July 18, 1954)

greenhouse and nursery operators who force bulbs for winter and early spring sales. Some of the bulbs for early forcing have been precooled and held in temperature controlled warehouses before shipping. These must be handled with speed.

Cleveland has become an important bulb receiving and distributing port. Some 3500 cases of Dutch bulbs are received during the brief season and distributed to 1500 different consignees in Ohio, eastern Indiana and western Pennsylvania. Bulbs are inspected in Holland and quarantine certificates accompany each shipment. This helps speed handling at the port of entry. Frequent stevedore strikes in the port of New York at the time bulbs are moving, have had direct bearing on the increase in bulb shipments into the lakes. The Dutch bulb growers cannot afford to take chances with the delays on the east coast and have turned increasingly to lake ports.

Miscellaneous Imports

Cleveland receives other seasonal commodities. Golf balls, for example, were part of a cargo delivered by the first foreign vessel into port in 1954. These were from England and destined for local fairways thru department store channels. Department stores import heavily for the Christmas trade. These shipments are of great variety: the ceramics, glassware, chinaware; the toys; religious articles; the plum puddings, marmalades, jellies and confections; the linens, works of art and the like. In contrast, there is variety in many other more everyday articles. Among these Cleveland receives: wood pulp and newsprint; monumental stone, marble and granite; aluminum scrap remelted into pigs; electrolytic nickel, tin, graphite, iron work and steel; machinery and machine tools; window glass; woodenware; bicycles and bicycle parts; automobiles, English-Fords and Hillmans; wines, beer and whiskey; canned fish, sardines, herring and mackerel; poppy, caraway and mustard seeds; vegetable oils, etc.

Miscellaneous Exports

The diversity of commodities received is matched by diversity of products sent out. In outbound trade Cleveland takes an active part. Many of its iron and steel products; machine tools, tools and dies; bolts, nuts, screws and rivets; electrical equipment and supplies; stoves and ranges; procelain enamels, paints, varnishes and chemicals; agricultural and earth moving equipment are helping fill

the holds of outgoing foreign ships. Many of the rubber products of the Akron area also make use of this shipping. Cleveland-made washing machines, vacuum cleaners, welding equipment, farm tractors, bulldozers, scrapers, trenchers and dump trucks have made up part of many cargoes. As have also, its plastics, its petroleum by-products, lubricating oils and automotive parts.

Port Procedure

Shipments from overseas are subject to duty and must clear customs in the port of entry. Such details are attended to by custom house brokers. The customs broker pays the duty and gets the permit which enables the consignee to take the shipment. The ship's manifest lists all merchandise on board; shows to whom it is consigned and the port to which it is to go. The captain of the ship mails one copy of the manifest to the Comptroller of Customs for the port and files one copy in the port. The Comptroller of Customs for the Cleveland District is in Philadelphia. The Port of Chicago has its own comptroller.

Overseas Shipping and the Improved Seaway

The improved seaway with a 27 foot channel and enlarged locks will permit the majority of ocean freighters to enter the Great Lakes. The chances are, however, that smaller vessels will continue to be the carriers, and that lines already familiar with the lakes and with established service will have the advantage. There is little likelihood that American vessels will compete with foreign lines for a share of the expanded trade. The lower costs of ship construction abroad and lower wages make American entry very unlikely. To meet foreign competition American shipping would have to be subsidized.

The Great Lakes-overseas shipping is highly competitive. On that account foreign shipping companies have little to say concerning plans for increased tonnage following the completion of the seaway. Plans for expanded trade are being made, however. The Oranje Line, for example, has new vessels specially constructed to meet the demands of the deepened seaway. These ships can be lengthened by having a new section added amidships. Their deadweight tonnage can thus be increased from 2800 to 4200 tons.

Overseas shipping companies while reluctant to discuss future plans, speak freely of other matters. They point to the inadequa-

cies of Great Lakes ports and to the need of improved warehousing facilities and port installations. They point to the need for more room for docking. They call attention to lack of adequate unloading equipment and storage space. A British shipping company claims that unloading at Cleveland absorbs one third the income from the cargo. This company reports Milwaukee and Chicago the only lake ports with adequate facilities.

American ports are aware of their deficiencies. Chicago and Milwaukee have already launched extensive port improvement programs. A recent news writer called attention to the need for improvement of such physical equipment at the Port of Chicago, as dock warehousing and cranes; and of such trained personnel as certified weighers. This writer reports that foreign shipments are handled at three privately owned docks and that at two of these, ships must use their own cranes in loading and unloading. At these docks there are no warehouses to protect shipments. Milwaukee has far better unloading facilities than Chicago, and often handles heavy commodities destined for Chicago, since the latter port lacks adequate cranes.

The problems of an expanding foreign trade are being considered by Ohio and its lake port cities. The governor of the state has set up a new Navigation and Harbors Commission with special subcommittees. One such committee is investigating harbor and dock facilities of Lake Erie ports, another is concerned with the economic effects of the seaway. Cleveland's mayor has a special seaway advisory committee. This city plans an economic survey of its port requirements. This six month's study will determine needs before millions are expended improving the physical facilities of the port. Toledo, on the contrary, feels there is no time for survey delays. The 1952 volume of trade at this port showed a 700 per cent increase over that of 1951. With growing trade already a problem, Toledo advocates immediate action.

Summary

The Great Lakes-overseas trade has had its phenomenal growth since World War II, and in spite of the handicaps of an antiquated St. Lawrence waterway. Small vessels under many flags have penetrated to the heart of North America and have engaged in a mutually helpful trade between Great Lakes ports and the ports of the British Isles and Europe. Manufactured products,

industrial raw materials, products of mines and farms have moved in both directions. The waterway has provided a direct and cheap means of transport.

The Great Lakes-overseas trade is already well established. Its future expansion is assured. Many handicaps under which it has operated will be removed with the completion of the deepened waterway. In the years ahead an ever increasing tonnage will move into the Great Lakes. Larger vessels will engage in the trade. The deepened St. Lawrence Seaway will add new and expanding foreign trade opportunities. It will initiate a new era in Great Lakes shipping.

POPULATION AND FOOD RESOURCES

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The latter half of the 20th century will undoubtedly go down in history as that period of time when positive efforts were initiated to eliminate human misery in the world, when surveys of the world's resources were carried out in order to determine their relative adequacy for meeting the needs of the world's people, and when the findings of research and technical know-how touched the lives of untold millions triggering off the upward spiral for a higher standard of living.

Acquaintance with, appreciation of, sympathy and tolerance for other peoples, plus an understanding of the underlying reasons for differences in the standard of living and stage of economic development is fodder for the geographer, but it is not enough as the 20th century grows older. Upon these basic concepts the humanitarian veneer must be spread heavily. The desire to help other peoples help themselves is a fundamental premise upon which functional democracy rests. We must, therefore, do a more objective and adequate job of "getting thru" to our students with this significant precept, for not only must they know what democracy is in the "raw," but also how it operates at home and abroad.

Since hunger (malnourishment and undernourishment) is a universal problem demanding solution, it is easy to interest students in a course entitled, "Population and Food Resources of the

World." This course may be divided into three parts: (1) World's Population, (2) World's Food Needs, and (3) World's Staple Foods.

Part one deals with a description and interpretation of the areal distribution of the world's population, the trend in the total population of the world, and the demographic characteristics for various segments of the population. The next logical step is to select countries which are typical of the phases of the population cycle (pre-industrial, expanding and stationary—to use Thompson's terminology), and proceed with a detailed analysis of the socioeconomic and other factors which contribute toward an understanding of each country's demographic status and problems. Especially is it necessary to emphasize the techniques employed to bring about improvements in land tenure, land use, diversification and expansion of production, illiteracy, health and sanitation, all of which will help to effect economic, social and ultimately cultural change in those societies.

The second part of this course reviews the prewar and postwar nutritional levels of the world's people and summarizes the contributions of various areas of specialization in their efforts to bring population and resources, especially food resources, more into focus. All relevant types of research are reviewed, including the most up-to-date information on hand from periodicals and press releases. This vast flood of literature may be pulled together under the headings of biochemistry, botany, nutrition, medicine, marine biology, physics, engineering, human relations, geography—to mention a few. It is convenient, also, to summarize the data under the economic headings of production, distribution and consumption. At this juncture it is well to review the Reports of the General Survey Missions Organized by the International Bank for Reconstruction and Development, the recommendations and accomplishments of the Food and Agricultural Organization and the World Health Organization, both United Nations Organizations. Also the student should look into the Colombo Plan, and the contributions of men and materials made by the Office of Foreign Agricultural Relations, the Ford and Rockefeller Foundations.

In addition, the student makes his contribution, for he presents to the class his views on, "How my major field can help solve the world's food and population problem." A further way of rationalizing the current research is to discuss in considerable detail how

the problem is being attacked in selected world regions where the work is well synthesized and progress is apparent in the lives of the people. In this connection Puerto Rico is playing a stellar role in meeting the challenge of overpopulation, and has now become a training center for other tropical and overpopulated areas.

The latter third of this course amplifies the economic geography of the staples that feed the world's people, i.e., rice, wheat, sugar, corn, meat, etc. The prewar and postwar pictures of production, distribution and consumption, plus the current tendencies are discussed.

Upon the culmination of this course the student feels that he has gained valuable insights into what is probably the most fundamental socioeconomic and humanitarian unsolved problem in the world of today. He is interested thruout the course and never fails to realize comprehensive understandings of how a high standard of living has been attained in the western countries, but that the mould does not fit the two-thirds of the world's people now existing in the "underdeveloped" agricultural societies of Asia, Africa and Latin America. Certainly those areas have the manpower as well as many undeveloped and underdeveloped natural resources. What they need most are the tools to make that man-resource power effective, namely, investment capital and technical know-how capable of orienting them in the analysis and solution of the problem particular to their environments and cultures. The task does not defy solution, however, it merely calls for a reassessment and coordination of the world's resources into rational patterns of production, distribution and consumption. This is everybody's job!

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PROGRESS IN PHILIPPINE AGRICULTURE

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The Philippines have been characterized as a country of practically unlimited agricultural potential. This is untrue. With few exceptions, Philippine soils are not especially fertile; some of them are actually quite low in native fertility. Secondly, climatic hazards

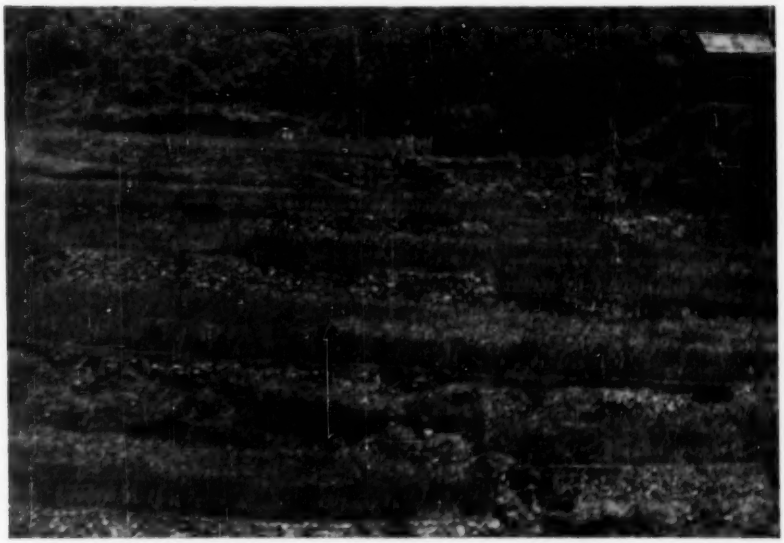

FIG. 1. Rice terraces near Vigan, northwestern Luzon. These terraces are more representative, but far less spectacular than the famous Benaue rice terraces, deep in Mountain Province.

(typhoons, drought, and occasional floods) cause far greater crop loss than most Westerners realize. None-the-less, there is considerable agricultural production, and almost all phases of agriculture are being expanded with profit. In 1950, all major crops were produced in greater volume than during the preceding year except sugar cane which suffered heavy damage from drought and typhoons. The production of coconut products, pineapples, and all domestic food crops was more than the prewar production. The tobacco industry showed more progress than at any time since the

war. Sugar and abaca output was well on the way toward the achievement of the prewar production.

Rice is easily the most important crop. Over 70 per cent of the population depends primarily upon rice for food. In 1950 the Philippines harvested the largest rice crop in its history with an output of 2,606,000 metric tons of palay (from 2,214,000 hectares). This 1950 figure is five per cent greater than in 1949 and 13 per cent greater than in 1939. The acreage increase over 1939 is also 13 per cent. As a result of typhoon damage and increased dissident activities along the margins of the "rice bowl" of Central Luzon, 1951

Fig. 2. A field of young sugar cane on a mechanized hacienda near Bacolod, northwestern Negros. This operation is called middle-breaking.

production was slightly, tho not materially less than the 1950 figure.[1] The biggest single problem of increased rice production is simply that of low yields per acre. The Philippine average (1950) of 26.75 cavans per hectare (21.32 bushels per acre) places it among the lowest of the major rice producing countries.[2] Increased utiliza-

[1] The 1952 production of 2,830,000 metric tons again set a national record and national self-sufficiency has been reached, but regional or local distribution has yet to be systematized.

[2] Philippine rice yields are normally about the same as those for French Indo-China, somewhat less than yields in India, Pakistan, Burma, Siam or Java, less than one-half as high as those of China and Formosa, and less than one-third as much as in Japan. The yield in Spain is oftentimes more than five times as high as that of the Philippines.

tion of commercial fertilizer is the prime requirement of the rice farmer, if the yield is to be materially increased. The use of selected seeds, an improvement of cultivation practices, and further development of pump irrigation systems are other pertinent recommendations. In addition to aiding the primary crop, pump irrigation may be of great importance, either to permit more than one

FIG. 3. Husking coconuts on Basilan Island.

crop of rice to be grown or to permit off-season food crops or crops that provide a measure of soil conservation. (Between 1952 and 1955, 135 cummunal pump irrigation associations were formed.) The large mechanized rice projects in Mindanao and Palawan, operated by the Land Settlement and Development Corporation, are excellent moves in the right direction, but their importance has been greatly overemphasized. Most of the claims that have been made in their behalf are still unproven.

Corn production increased from 534,000 metric tons in 1949 to 574,000 tons in 1950 and from 866,000 hectares to 909,000 hectares in the same period.[3] Of the major prewar corn areas, only Bohol has decreased in importance. The introduction of United States and Mexican hybrid varieties will no doubt improve yields materially, but to-date plantings of hybrid seeds are, in most cases, restricted to experimental farms and other small areas. None has yet proven really successful in the Philippine environment (1952).

Fig. 4. An abaca experimental plot under dap-dap shade at the Guinobatan Abaca Experiment Station, southeastern Luzon.

The sugar industry has returned to its prewar level. Both world and domestic quotas were filled in 1953-54 when production was almost 1½ million short tons. Production in a few districts (Bais, for example) had surpassed the quota for those areas as early as 1950-51. Most sugar centrals have more modern equipment than they had before the war. Several of them are engaged in research in their own experiment plots with respect to new varieties. Nonethe-less, from an overall aspect, the industry has a long way to go

[3] The 1952 production was 780,000 metric tons.

if its product is to compete on the world market.[4] Some mills are inefficiently operated and sucrose recovery is low. Many planters were still using seed stock (points) of inferior varieties of cane in 1950-51. There is a large percentage of small planters, especially in the districts on Luzon, and most of them are financially incapable of using modern methods of production, with a consequent lower tonnage yield of cane per acre. Careful attention will have to be paid to the cost of production. However, it is quite probable that the better mills, particularly those in districts with a high percentage of successful planters, can make whatever transition to lower prices may be necessary in order to compete with other world areas.

Copra and desiccated coconut are being produced in greater quantity than before the war. (Almost 800,000 tons of copra were produced in 1954.) Coconut oil production, however, is somewhat lower as some of the prewar oil mills have not been rebuilt. The primary market has been, and is likely to continue to be the United States. Emphasis must be upon improving the quality of the copra and upon the control of the disease that is now attacking the trees, particularly in the coconut areas of southern Luzon.

Abaca (Manila hemp), the world's premium hard fiber, is a virtual Philippine monopoly. However, it does face serious competition from other fibers, particularly sisal. Secondly, abaca production has been started in Central American republics (Panama, Honduras, Guatemala, and Costa Rica). Production costs are higher in the Middle American areas than in the Philippines, but nearness to market and the possibility of greater mechanization may permit successful competition with the Orient. Philippine production dropped to a modern low of 524,586 bales in 1949, but climbed to 998,000 bales in 1951, the highest since the war, but still well below the 1,300,000 bales of 1940. The 1954 production was 730,000 bales. As exemplified in other industries, a variety of problems affect production. In this case there are problems of land tenure and of finance. Both directly or indirectly handicap mechanization. Only in the Davao area are there large abaca plantations, and it is in this area that the superior fiber of commerce is produced. The mosaic disease is, without question, the most serious problem

[4] The Philippine Trade Act of 1946 permitted Philippine products to enter the United States duty-free until 1954. This Act is currently under renegotiation and Congress may extend this date.

of the industry. Disease-free and disease-resistant seedlings must be developed or an economical means of disease control must be found. The future of the industry is dependent upon effective governmental action and upon the full co-operation of those engaged in abaca production.[5]

Tobacco was an important export crop before the war. However, the foreign market for the famous Manila cigar has been lost, and it appears that it will not be regained. Hence, in the immediate future the emphasis must be placed, and is being placed upon production for the expanding domestic market. The demand for American-type cigarettes is great and both cigars and cheaper cigarettes have a wide market. Overall tobacco production has been less than in prewar years, but Virginia-type cigarette filler tobaccos have been introduced and production is expanding. Tobacco and tobacco products are again exported from the Philippines, to Spain and the United States.

Agricultural progress is real, and continued expansion is probable. There are many avenues of continued progress. With significant areas of unopened land, resettlement has just begun. There should be no over-population in certain areas, no really food-deficit areas. It should not be necessary to import basic food-stuffs (rice, coffee, cacao, meats, eggs, for example). Development in agriculture must be based upon a realistic program of experimentation and scientific research. This is equally true in the field of plant breeding and in animal science. The establishment of an adequate food conservation and preserving industry is of vital importance because the Philippines is a country virtually without modern refrigeration. Large quantities of food are lost by deterioration and spoilage. Better distribution facilities for agricultural produce are vitally needed. The Agricultural Extension Service must be realistic. The small farmer can be shown that fertilization and improved seed pay dividends in higher crop yields, but this is a slow process.

Philippine economy is, and will continue to be cast upon an agricultural base, even after the current impetus to expansion of manufacturing has expanded that phase of the economy. The country is not an agricultural paradise, but it is a country of considerable agricultural potential, with some aspects of this potential still virtually untapped.

[5] For details of Philippine abaca production see J. E. Spencer, "Abaca and the Philippines." *Economic Geography*, Vol. 27 (1951), pp. 95-106.

FIREWORKS IN THE CLASSROOM: NATHANIEL SOUTHGATE SHALER AS A TEACHER

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I

Daily, for nearly half a century, a tall, erect Southerner walked briskly across Harvard Yard to his classes. Virtually all of Nathaniel Southgate Shaler's life was devoted to the university; a student at eighteen, lecturer at twenty-three, full professor at twenty-eight, and, for the last fifteen years of his life, dean of Lawrence Scientific School.

Despite those long years of intimate association with one institution, he never developed that narrow provincialism which often marks one whose roots are planted so deeply. The breadth of Shaler's interests and experiences was as vast as that of the many-sided man of the Renaissance. Born in 1841, he grew up in a slave-holding community in Kentucky, but during the Civil War, feeling one strong nation to be more important than two warring ones, he fought as an officer in the Union Army. He served as geological director for both his native state and his state of adoption, Massachusetts, and was the respected advisor to mining companies and national governmental agencies. An early physical and human geographer and conservationist, he was a pioneer in the teaching and writing of the geography of North America.[1] Humanist as well as naturalist, Professor Shaler was a brilliant public lecturer and the author of twenty-six books and over two hundred articles ranging from scholarly geological and geographical papers to several poetical works and a five-volume Elizabethan drama.

[1] At the time Shaler was teaching (1864-1906), geology courses largely carried geography at the college level. While all of Shaler's courses were labled "Geology" in the catalogue, much of the material with which he dealt was geographical in content. Shaler's three volume work, *The United States of America*, was the first real geography of our nation. He was also an early leader in the movement toward conserving our natural resources as his book *Man and the Earth* so eloquently testifies. J. Russell Smith, in the first edition of *North America*, pointed out Shaler's place as a geographer by describing him as "a pioneer appreciator of the relationship between earth and man." Thus, it behooves us as geographers to recognize Nathaniel Southgate Shaler as one of the founders of the geographical fraternity in this country.

II

Albeit this catholicity of interests, Nathaniel Southgate Shaler was primarily a teacher and it was his happy boast that for nearly forty years few Harvard men took their degrees without coming under his instruction.

Everyone entering Harvard for the first time would be urged by his colleagues to take at least one course with Shaler. His introductory class, listed in the college catalogue as Geology 4, was always filled to overflowing. The crowds became so great that the class eventually met in Sanders Theatre and Shaler never failed to fill it. As many as five hundred students might be registered in Geology 4 at one time.

The course was popular for several reasons, best perhaps being that it was not too hard, but also because Shaler was an exceedingly entertaining lecturer. He would walk in when the class was seated, sit down on the platform, and as if in a drawing room, talk without notes. When he had finished his lecture he rose and walked quickly out of the building. There was no roll call, no assignments, and few examinations.

Geology 4 became celebrated on the campus as "Jolly 4" and Shaler's lectures were commonly described as "the fireworks." Professor Shaler's personality became the subject of a wealth of anecdotes and his students often spoke of him as "Uncle Nat."

Despite his dealing with necessarily rock-ribbed subjects, Shaler managed to make geology and geography live. He had a picturesque manner of speaking. When describing the tragedy of soil erosion the dust would fairly blow into the eyes of the students. In the process of characterizing an active volcano, Shaler himself would become the volcano, and when he let it erupt the boys were always glad to note that the ceiling had not gone up along with his arms and voice.

Shaler's talents as a teacher were not confined to the lecture hall. His field excursions were exceedingly popular and became known on the campus as "Professor Shaler's Field Days." He was an enthusiast in the field and led his party at a lively pace. As he grew older he was fond of telling of overhearing two boys talking together on one of these expeditions. "Where's the old man?" inquired one. "Shut up!" exclaimed the other, "He'll walk your d— legs off if he hears you call him an old man."

While Shaler dealt with the more dazzling aspects of physical geography in "Jolly 4," no student left his lectures without a broader sympathy and understanding of nature and a more profound respect for man's relation to the earth.

A campus legend had it that Shaler utilized his own unique marking system in determining grades. After an examination it was said that he would pile the great mountain of bluebooks upon a sofa where they would lie untouched for a week or two. Finally, one day he would dig deeply into the pile, pull out an armload and carry it across the room where he would deposit it on a chair. Another week would pass and again he would delve into the pile, scoop out a second armload and place it on the next chair. This process would be repeated each week until all of the papers were distributed upon four chairs on the other side of the room. To those papers on the first chair he gave A's; those on the second received B's; the third, C's; the fourth, D's; and all of the papers that had fallen to the floor in this completely indiscriminate grading system, failed. But, no matter what his method of awarding grades, his students knew they had been privileged to have sat under a man who did more than merely hold class. He knew how to awaken scientific spirit and appealed to a wide variety of human interests. Never again could the earth's crust seem inert and uninteresting to one whose eyes had been opened by Professor Shaler.

III

In his appearance, speech and manners, Shaler seemed to many to be the prototype of the fictional southern aristocrat. Some of his students referred to him as "the Confederate General" even tho they all knew he had been a Union artillery officer, but his tall, slim figure, broad-brimmed hat and white beard fitted so well his antebellum Kentucky background. His deeply engrained sense of honor and chivalry completed this picture.

Dean Shaler had no place for the shirk or lazy student and he was a terror for one who showed any signs of dishonesty; however, his generosity toward the struggling scholar was matched by few. He keenly felt the necessity for individual action in the case of every student who came before him. Detesting any effort to mechanize the treatment of youth, despite the pressures of his colleagues to enforce a fixed code of disciplinary rules, he preferred to act on

the merits of each case as it arose. To many of his fellow faculty members he seemed to be continually battling them on behalf of perverse scholars, but he was determined to stand by a boy whom he felt was in the right. Nevertheless, he could never forgive lying, cheating, or meanness. For those who were thoroly incorrigible he could express but one sentence: "Take him to the edge of the earth and drop him off."

Typical of one raised in a land where courtesy and thotfulness to one's fellow creatures is an integral part of life, Nathaniel Southgate Shaler made it his business to look in on Stillman Infirmary almost everyday. He never failed to call on a student in his department who was ill. To those boys who were lonely or needed advice and fellowship his office and home were always open and he was ever concerned over the young men who had to struggle financially getting thru college. It was his policy as Dean continually to solicit wealthy friends on behalf of deserving scholars. Many a graduate owed his degree to Shaler's benevolence and influence.

IV

Early in his teaching career Professor Shaler came to feel that the summers should be made more profitable to students. Accordingly, in 1872, he undertook a summer trip from Cambridge to central Virginia, his wife and two daughters in a wagon, and himself and ten geography and geology students on foot. Three years later he organized the first field course given at Camp Harvard, Cumberland Gap, Kentucky. From these humble pioneer beginnings evolved the Harvard Summer School.

Dr. Shaler headed the committee appointed by President Eliot in 1886 to take charge of the development of summer courses, and five years later, when the Faculty of Arts and Sciences officially recognized these courses, Shaler headed the faculty committee on summer instruction.

It was his feeling that the summer school offered Harvard a distinct opportunity to extend the influence of the university. He was particularly delighted with the teachers who flocked to Cambridge for the summer sessions altho he would often jokingly say, "These summer school students think they own the university, especially the women."

While Shaler was never partial to coeducation, he did sincerely believe that women should be given every advantage in securing the

best in a liberal education. In recognition of this conviction he presided at the meeting which laid the groundwork for the founding of Radcliffe College.

V

Burdened with a heavy load of teaching and administrative duties, Nathaniel Southgate Shaler managed to find many opportunities to carry his interests outside the bounds of Harvard Yard. Writing, lecturing, and business affairs demanded many hours of his day. In his relations with the local community, the state, and the national government, he was far more conscious of civic duties than are most men. Few Harvard professors were so well known and loved by the townspeople of Cambridge.

"This myriad-minded and multiple-personalitied embodiment of all academic and extra-academic knowledge," as William James once described Shaler, had a deep and abiding reverence for the dignity of his fellow man. In this, perhaps, we find the key to his magnitude as a teacher.

ACKNOWLEDGMENTS

Those who had work with Nathaniel Southgate Shaler are legion, but like Shaler, many of them are gone. However, to two men who took graduate courses under his direction the writer wishes to acknowledge a debt of gratitude for their kindness in supplying him with information that could not be obtained from other sources. They are: Dr. Robert Marshall Brown, Professor of Geography, Emeritus, Rhode Island College of Education, and Dr. George David Hubbard, Professor of Geology and Geography, Emeritus, Oberlin College.

The writer also wishes to express his appreciation, for unfailingly sound advice, to his teacher, Dr. J. Russell Whitaker, who first awakened his interest in the study of our "professional ancestors." This paper has been written as a small contribution toward filling the gap in our knowledge of our forebears as geographers, the need for which was clearly indicated in Professor Whitaker's presidential address before the Association of American Geographers, April 14, 1954.

GEOGRAPHY TESTS FOR GRADE ONE

LORENA MITCHELL
Centralia, Illinois

Every child should have a readiness program in the primary grades before he enters into the formal study of geography in the fourth grade. It is the duty of every primary teacher to follow a well planned readiness approach, which will help the young child make sense out of the physical world in which he lives. In following such a program, simple tests devised on a first grade level will prove interesting to the young child and indispensable to the teacher who wants to judge the effectiveness and worthwhileness of such a program.

TEST I

Draw a line under the words in the boxes which make the sentences correct.

1. We play in snow

In Autumn
In Summer
In Winter

2. The air is very cold

In Summer
In Winter
In Autumn

3. The days are longer

In Autumn
In Summer
In Winter

4. We wear our warm coats

In Winter
In Summer
In Autumn

5. We see more cloudy skies

In Summer
In Winter
In Autumn

Test II

Draw a circle around *yes* or *no*, whichever word answers correctly.

1. Leaves are green in summer ..... Yes — No
2. Our thermometer tells us when days are cold ..... Yes — No
3. Hot air helps change water to ice ..... Yes — No
4. We can play outdoors longer in summer ..... Yes — No
5. The sun makes us cold ..... Yes — No
6. Animals need water to live ..... Yes — No
7. Plants do not need water to live ..... Yes — No
8. We can see the wind ..... Yes — No
9. Animals need homes in winter ..... Yes — No
10. We do not need sunshine ..... Yes — No

Test III

Draw your shadow.

MORNING

See the sun.
It is morning.
Draw your shadow.

NOON

See the sun.
It is noon.
Draw your shadow.

AFTERNOON

See the sun.
It is afternoon.
Draw your shadow.

Test IV

Geography Riddles

Who Am I?

1. I am big.
   I look yellow.
   I bring you light.
   I make you warm.

Star	Moon	Sun

2. I help plants grow.
   I come from the clouds.
   I help make rivers.
   I help the boats.

Rain	Sun	Fog

3. I am an animal.
   I live on the farm.
   I say Moo! Moo!
   I give you good food.

Milk	eggs	lettuce

4. You cannot see me.
   You can feel me.
   I turn wind mills.
   I help fly kites.

Sun	Moon	Wind

5. I am a plant.
   I am green in summer.
   I am green in winter.
   I make you happy at Christmas time.

Dog	Tree	Ball

6. I am little.
   I go south in winter.
   I come to see you in spring.
   I can fly.
   I have blue eggs in my nest.

Rabbit	Robin	Kitten

TEST V

Activity Test

Children at the first grade level are very much interested in activities. At the close of the nine month term the teacher can plan an activity test.

1. Collect pictures during the term from magazines, calendars, etc. (old science books are a good source), which show scenery, landscape, activities, homes, holidays. Have the children help collect pictures as each lesson is presented. Save all pictures.

2. Place a long strip of wrapping paper across the blackboard. Divide paper into four equal parts. Print the name of the four seasons.

3. Place collection of pictures, which have been shuffled together, on table. Let each child select a picture for each season and paste under the season in which he thinks it belongs. If one child should place his picture under the wrong season, some observant child who notices it may place a circle around it after he gives an acceptable reason and explanation of where it should belong.

The wrapping paper can be glued onto two broomsticks. As one child rolls his stick to bring into view each season (much as a strip film) members of the class can give oral explanations for what they see. Another child can hold the other stick from which the paper is being unrolled.

This might be used as an activity test for city and farm transportation, old and new or any unit.

TEST VI

Activities of Geography in Art

Ask children to draw pictures of the seasons, not all at one time. Maybe one day we draw a picture of what we might see in winter.
Things to note:

1. Leafless trees.
2. Smoke coming from house chimneys.
3. Coloring of sky. (clouds, etc.)
4. Snowmen.
5. Clothing of children drawn.
6. Sleds, snowball play, etc.
7. Shoveling of snow.
8. Lack of flowers and green plants.

TEST VII

Music Geography Test

1. Songs for each season have been taught during the nine months.
2. The teacher may name the season and let the children sing a song appropriate for the season named. (individually) This cannot be done in one period but each child can take turns in several periods.

TEST VIII

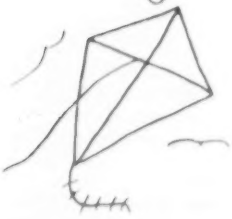
1. Have each child draw a picture of his school room. Mark North, East, South, and West. These may be done by N—E—S—W. Color the street which he travels home red. Color other streets green. Locate and draw his desk, teacher's desk, windows, bulletin board and the blackboard. Draw the door leading outside and the door leading to hallway. Let him place the sun where he sees it from his room mornings.

Test IX

Winter

Summer

Autumn



Spring

When would we see these? Draw a line to the name of the season. Now you may color the pictures.

TEST X

1. The thermometer says 80. Is it a warm or cold day? _____
2. Our globe shows us the earth is _____
3. Days are longer or shorter in summer. _____
4. The thermometer says 30. Is it hot or cold outside? _____
5. Our globe shows us more water or more land. _____
6. Days get shorter in winter or summer. _____
7. We plant our gardens in spring or autumn. _____

GEOGRAPHY—A PATH TO WORLD UNDERSTANDING

GEORGE D. STEVENS
Lyman Hall High School, Wallingford, Conn.

We of 1955 live in a world which is no more than thirty hours distance from us and grows smaller and closer with every passing day. Nations on the opposite side of our planet have become next-door neighbors overnight and trouble in any part of the world becomes the trouble of the world. Communications deal in terms of seconds and minutes and the era of living alone has passed into history to be replaced by the age of living together. If the world is to have an era of peace and organizations like the United Nations are to be given their opportunities for success it is imperative that nations understand one another. The basic foundation upon which world understanding is to be built can be realized in the study of geography. The secondary school curriculum, often the last stopping place in the program of formal education before a pupil takes the step into active and practical citizenship in the community, state, nation, and world is sadly lacking in the shouldering of teaching this important subject.

Educators too often leave the teaching of geography to inclusion as a unit in other courses such as history, civics, and economics. This method is both dangerous and unwholesome for when sacrifices must be made because of lack of time geography is called upon to make the supreme sacrifice of elimination. We have witnessed no general rush on the part of those who supervise the con-

struction of the curriculum to include geography as a separate course in the high school. For some untold reason the educator still needs to be convinced before he will take any action.

Results in attaining a better understanding of the importance of geography must come about thru a concerted drive on the part of those interested in proving (1) that the high school student is sadly lacking in his knowledge of geographical information and (2) that geography is playing an increasingly important role in the understanding of world affairs. Before any successful achievement can be made in attaining these objectives there are certain obstacles that must be overcome. The big question that must be answered is, "How can we convince school administrators that geography merits wider attention in the public school systems and especially in the high school?" College geographers are appalled at the lack of geographic information found among pupils entering their classes for the first time.

School superintendents and principals always seem to have the same answers when questioned about geography in the curriculum. "The high school curriculum is already overcrowded and the addition of special courses in geography would mean the elimination of a more established subject in the program of studies." Educators hestitate when it comes to the elimination of courses in history, English, science, or math for teachers in these fields consider their courses "first in importance" and demanded for college preparation and admission. These obstacles can be overcome only by careful planning on the part of those who are intensely interested and understand clearly the day by day increase in the importance of geography.

The drive to get geography into the curriculum must go further than the office of the superintendent and principal. Parents, school study groups, P.T.A. members, boards of education, etc. must be contacted with a well developed plan aimed at proving that the youth of today, fast becoming the citizen of tomorrow, needs to know more about the world in which he lives. Groups within the community can be made to realize the dynamic need for an understanding of the fundamental aspects of geography as a prerequisite for better service as a citizen. Only when such groups attain that understanding can the drive to get more geography into the curriculum go forward and this important aspect of world understanding attain its rightful place in the program of education.

There are many ways that interested teachers can assist in the drive for more geography. Most teachers recognize the importance of geography but hesitate when it comes to taking a definite stand or step. When this is true, it becomes necessary to do some further convincing and the teacher fired with desire for the attainment of this goal will use every means possible to do that convincing. There are a few suggestions listed in this article for a plan of action among those who feel that within their own teaching situation, there is a definite need for more attention to geography. If proof is needed to get educators to take action, then those who are interested will get that proof. The program may take time but it will have compensating rewards.

1. Give a good survey test covering the fundamentals of geography in classes in your school. Prepared tests are available or the teacher may wish to make one of his own. Include geographical aspects of world problems as well as geographic terms and applications. A bit of place geography should also be included. A map test is often quite revealing. Give the test in both the Freshman and Senior classes. Summarize your findings and use them as part of the tools in your drive for geography in the curriculum. A test such as this is often ironclad proof of the need for the teaching of geography.
2. After a summarization of the results of the test, write a detailed statement of your own feeling about the importance of geography. There are many available resources that will help you to summarize the importance of this subject.
3. Discuss the importance of geography with your fellow teachers and in department meetings. Teachers of other subjects such as English and science as a rule recognize the importance of geography in their own particular fields. Teachers in the social studies department either realize already or can be made to realize that geography is one of the most important aspects in the understanding of history, sociology, economics, and government.
4. Carry the matter to your principal and to your superintendent. Be ready to defend your arguments with real down-to-earth facts. Offer to write a summarization of your findings to be presented to the Board of Education in furthering your drive.

The above are but a few suggestions on what can be done if teachers are ready to do some real work in moving toward better world understanding. There are many more ways of action.

In closing, let me say that an understanding of geography allows the pupil to interpret problems of an international scope. Geography should, in the world of the second half of the twentieth century, emerge as one of the most dynamic subjects of the present school curriculum. The critical aspect of current history demands that we do everything possible to learn how other people live and why. Our young citizens need to know the causes of disagreement and lack of harmony and many are based in geographical factors.

Geography has the answers to many questions concerning the headaches of the world. Only when people come to the realization that the teaching of geography demands an important place in our school program will people make progress toward the conquering of international problems of a political, social, and economic nature.

THE NATIONAL COUNCIL AT WORK

The September Journal carried a partial list of names of those who are to participate in the annual meetings in Indianapolis. The list which follows completes the report for the present.

Leaders of Sectional Meetings: Clarence M. Drews, River Forest, Illinois; R. Paul Terrell, Bowling Green, Kentucky.

Panelists in Sectional Meetings: Emily H. Baker, St. Louis, Missouri; George S. Corfield, Lincoln, Nebraska; Erna G. Grassmuck, California, Pennsylvania; Floy Hurlbut, Muncie, Indiana; Ray E. Kehoe, Ann Arbor, Michigan; Harriet R. Long, Edinboro, Pennsylvania; John W. Morris, Norman, Oklahoma; Herman L. Nelson, Cedar Falls, Iowa; Sister M. Ursula, Cresson, Pennsylvania.

Recorders in Sectional Meetings: Edna M. Fleming, Waterloo, Iowa; Anna Moengen, Hammond, Indiana; Hildegard Binder Johnson, St. Paul, Minnesota; Bernt L. Wills, Grand Forks, North Dakota.

Hosts and Hostesses: Devilla Baker, Indianapolis, Indiana; Hermine K. Bauschard, Erie, Pennsylvania; Robert Drummond, Terre Haute, Indiana; Sam E. Clagg, Huntington, West Virginia; Lois R. Keller, Shaker Heights, Ohio; Neva McDavitt, Normal, Illinois; Jack Ransome, Bloomington, Indiana; Bernard H. Schocke, Valparaiso, Indiana; Ruth D. Stoveken, Milwaukee, Wisconsin.

The Secretary of NCGT, Ina C. Robertson, reports that the following members have completed five consecutive years of membership in good standing and are now designated as Fellows, for the period January to June 1955: Rev. J. Gerard Aumont; Dr. Paula Spitta Bücking; Blanche O. Cullumber; Donald R. Dyer; Mrs. Henry P. Matherne; James S. Matthews; Zita Mueller; Main Library University of Manitoba; Arthur Parks; James D. Patzer; Mrs. Homer Phillips; William E. Powers; Herbert D. Reas; Wm. H. Sadlier, Inc.; Ruth A. Schindler; Andrew L. Scott; Dale E. Thomas; Laurence G. Wolf; James R. Wray; N. Walker Wright; Julia Ziskowski.

The Nominations Committee has submitted a list of qualified candidates. Members in good standing for the five consecutive years at the time of nomination are eligible to hold office in the National Council. The Committee of Clyde Kohn, chairman, and Helen Mixter, Frances Hanson, and John Finney thought it desirable to acquaint you with the candidates by presenting a brief summary of their activities.

For President: Norman Carls, Ph.D., Clark University. Present position, Professor and Head of Dept. of Geography, Univ. of Pittsburgh; has taught in Oregon, Illinois, Washington, D.C., Lt. Cmdr. USNR, 1942-46; co-author of textbooks.

For First Vice-President: Ina Cullom Robertson, M.A., Clark University. Present position, Head of Dept. of Geography, State Teachers College, Valley City, North Dakota; Secretary of NCGT 1951-55; active in Gamma Theta Upsilon; exchange teacher, Europe, 1937-38; author of articles in professional magazines.

For Second Vice-President: MARY VIOLA PHILLIPS, M.A., University of Pittsburgh. Present position, Teacher, Senior High School, New Kensington, Pennsylvania, was State Chairman of Geography Division of Pennsylvania Curriculum Revision Program; active in State and National Geography Councils; author of many articles on the teaching of geography at high school level; present Director of Publicity of NCGT.

For Secretary: JOHN W. MORRIS, Ph.D. Peabody College for Teachers. At present, Professor of Geography, University of Oklahoma; in Military Services War II and Korea; active in NCGT and the State Coordinator. Author of "Oklahoma Geography" and numerous articles.

For Treasurer: JOHN H. GARLAND, Ph.D., University of Chicago. At present, Professor of Geography, University of Illinois; has taught at high school or college level in Illinois, Ohio, and Washington; has served as Treasurer of NCGT since 1944; active on committees. Author of textbooks and articles.

For Executive Board: ADAH FLEMINGTON, M.A., University of Chicago. At present, Teacher, New Trier Township High School, Winnetka, Illinois. Exchange teacher to England, 1937-38; active in NCGT work and on committees.

FLORENCE CUILLIN, M.A., University of Minnesota; is Asst. Prof., Dept. of Geography, North Texas State College at Denton. NCGT State Coordinator for Texas; active in State and National Councils and committees.

CLARENCE WOODROW SORENSEN, Ph.D., University of Chicago. At present, Assoc. Prof. Geography, Illinois State Normal University at Normal; Chr. of Committee on General Education; Director of Pakistan Project, 1951-52; Educational consultant; author and co-author of textbooks and frequent contributor of articles to yearbooks and periodicals.

The attention of the membership is called to the joint session of NCGT and NCSS (National Council for the Social Studies) on Saturday morning, November 26, at Indianapolis. Refer to the September JOURNAL for details. Invite your colleagues, non-members of NCGT, members of NCSS, and those interested in education to attend the annual meetings. The success of the Friday afternoon and Saturday morning sessions depends upon participation from the audience! Do come and make your vocal contribution to the cause of better educational practices in teaching.

M. MELVINA SVEC, *President*

GEOGRAPHICAL PUBLICATIONS

Ruby M. Harris. Northeastern United States series of four filmstrips entitled **Living in New England** (46 frames); **Valley Regions of the Northeast** (44 frames); **Five Great Cities** (42 frames); and **Where East and South Meet** (46 frames). Society for Visual Education, Chicago 14. Each strip $6.00 and complete set $19.00.

The filmstrips are others in the series in which the McConnell text, *Geography of American Peoples*, is mentioned in the introductory frames. However, their broad themes make them useful with other texts as well as on other than elementary levels.

Large scale Rand-McNally color layer maps provide the setting for each film. The detail of the maps is of special value in these films. Map emphasis, obtained by white lines, is very effective.

In *Living in New England* physical features that were a handicap to early settlers form the background for modern ways of making a living in fishing, forestry (lumber,

pulp, maple syrup), grazing and dairying. Crop specialties include potatoes, cranberries and tobacco. Manufacturing and transportation are influenced by the rivers and their falls and rapids. New England's varied resources for recreation and vocations are shown.

Valley Regions of the Northeast gives a very unique presentation of the contrast between the Hudson-Mohawk and the Appalachian Valleys. Many route-ways and large urban concentrations with varied manufacturing charactize the Hudson-Mohawk Valley. The Appalachian Valleys emphasize the coal mining, the location of steel mills and the growth of Pittsburgh on the junction of the rivers that form the Ohio.

Five Great Cities portrays the ports of Boston, New York, Philadelphia and Baltimore. Washington is the fifth city. In the latter, emphasis is placed on the Capitol's governmental function with interesting views of the Capitol, White House and office buildings.

Transportation, with emphasis on various port phases, characterizes the four seaboard cities. Special attention is given the islands of Boston Harbor, heavy manufacturing establishments on the outskirts of New York, Navy yards of Philadelphia and the steel mills near Baltimore.

Where East and South Meet is of special interest for its portrayal of the physiographic provinces. The outstanding physical and cultural landscapes associated with each province bring the differences between them into sharp focus. The James River ports and their industries complete the study of the major North Atlantic seaboard cities begun in the last filmstrip.

The historical sites of Mt. Vernon and Williamsburg are included. Other recreational opportunities are furnished by beaches, forests and mountains.

This series of filmstrips adds significant visual material for understanding an important section of the United States.

Annemarie Krause

Southern Illinois University
Carbondale, Illinois

G. V. Jacks. **Soil.** Philosophical Library, New York, 1954. ix and 221 pages with illustrations and index. $5.00.

One finds in this book more information about soils than is presented in physical geography textbooks and a less technical discussion of their various characteristics, classifications and uses than can be found in most textbooks on soil science. The author, who is the Director of the Commonwealth Bureau of Soil Science at Rothamstead, has attempted to place before the reader the latest and most fundamental findings on each aspect of soils in as simple a manner as possible without diverging too far from scientific orthodoxy.

Altho the book is intended as a practical guide to farmers in applying the scientific principles of soil management, it contains much of real value to the geographer who gives special attention to soils. It describes in simple language the basic properties of all soils and how these vary according to the conditions under which a soil is formed. It shows that soil structure is a highly complex phenomenon, that man is the most powerful agent acting on it, and that agricultural operations affect the biology, chemistry and production capacity of the soil. Chapters are also devoted to soil texture and structure, chemical constituents, water, humus, biological factors, classifications, cultivation techniques and erosion. The maps and illustrations are especially clear and pertinent, including several soil profiles in color.

The principal deficiency of this book from a geographer's viewpoint is the limited treatment of soils and their management outside the British Isles.

Library of Congress Arch C. Gerlach

John Giaever. Translated from Norwegian by E. M. Huggard. **The White Desert.** E. P. Dutton and Co., Inc., New York, 1955. 256 pages with photographs, maps and diagrams. $5.00.

One of the most interesting, productive and well-organized of recent polar expeditions was the Norwegian-British-Swedish Antarctic Expedition of 1949-52. As its name indicates this was an international undertaking, carried out officially by three nations and incidentally, including also scientists from Australia and Canada. Leaders in the organizing committee were Professor H. W. Ahlmann, the distinguished Swedish geographer, Professor Harold U. Sverdrup of the Norwegian Polar Institute and Professor James M. Wordie, President of the Royal Geographical Society. This sponsorship guaranteed the quality of the expedition's scientific objectives and the caliber of its field personnel.

In addition to carrying out basic studies in glaciology, meteorology, magnetism, the aurora, geology and biology, the expedition mapped from the air and by ground surveys a considerable part of Queen Maud Land, the Norwegian Antarctic territory near Weddell Sea. Among the most novel of the results was a profile of part of the ice-cap and the land submerged beneath it. This was obtained by setting off explosives and timing the echoes as they rebounded from the buried rock. The profile reveals that the land drops below sea level, as much as 250 miles inland from Maudheim, the expedition base, and that the buried continent has an extremely rugged surface. Similar results have been found from sounding the Greenland Icecap.

While the purposes of the expedition were purely scientific, *The White Desert* tells an interesting and even exciting tale of life in "the home of the blizzard" as the far south has been called. Although the best of modern mechanical equipment was used, the book shows clearly that antarctic exploration is still largely a matter of dog-driving, living a lonely life on the trail with a diet of pemmican and a little tent between a man and disaster—and the perpetual shovelling of snow to avoid having the base camp buried.

In view of the many expeditions that are to visit the Antarctic in the next few years, *The White Desert* should prove interesting reading for high school students.

TREVOR LLOYD

Dartmouth College

John Bartholomew, ed., **The Columbus Atlas.** John Bartholomew & Son Ltd., Edinburgh, and McGraw-Hill Book Company, Inc., New York. viii and 137 pages plus 160 pages of maps. $10.00.

The Columbus Atlas, edited and printed in Scotland, and distributed by an American organization, is designed as a world atlas with the United States market in mind. Unlike the usual European-made atlas, it begins its series of maps with the United States, proceeds to Canada, followed by maps of Mexico, Central America, the Caribbean and South America. The coverage of the rest of the world, beginning with Europe, follows the some thirty maps of the New World.

The introductory map, on Bartholomew's "Atlantis" projection depicts the member nations of the United Nations. Map 1, following, places North America in its strategic position, using Bartholomew's "Nordic" equal-area projection. From this world-oriented and continent-oriented introduction, the series of maps begins with national and regional maps of the United States. Following some 152 pages of various continental and regional maps, the map portion is concluded with world maps of population, climatic types, natural vegetation, soils, routes and landforms. The following index includes some 50,000 place names and the populations of chief cities and towns.

The maps maintain the high standards of the Bartholomew organization, are pleasingly colored, legible and artistic. Layer coloring to show ocean depths and continental

altitudes is well-chosen and evident and does not interfere with legibility; cartography is excellent. A feature of value is the naming of many of the map projections on the map itself. The atlas is valuable for the library table of the layman as well as the shelf of the geographer or the desk of a student.

One shortcoming for future reference is the lack of dating of the maps or the atlas itself. The title page and the front matter carry no date. The population figures for the U.S. cities and towns are close to the 1950 Census but not the exact figures. Only in the end matter, following the index, can the atlas be dated through a Bartholomew listing of atlases wherein one is listed as 1952 and another as "in course of preparation 1953.".

LOYAL DURAND, JR.

The University of Tennessee

George H. T. Kimble, **Our American Weather**. McGraw-Hill Book Co., New York, 1955. 322 pages with illustrations and index. $4.75.

The flow of books popularizing the story of the weather seems never ending. In fact, in recent years the stream has attained almost flood stage. But each author has a different approach and be it said also their scientific quality is distinctly above that of their early predecessors.

Our American Weather simulates to some extent an almanac in form. However, its content should not be confused with that of the common variety given away by the neighborhood merchant. The book is divided into twelve chapters, each carrying the title of one of the twelve months and serving as the vehicle for discussing the weather and its numerous associated meterological problems.

The story is told in lively fashion with a bit of humor mixed in here and there. Occasionally the author takes an excursion into the realm of theory which the person untrained in meteorology is likely to find beyond his momentary comprehension. Even so, there is much which would profit a teacher or student of geography to read.

The title of the book is of interest in the light of the nature of the content. By "American" the author apparently means the United Statesian and Canadian. There seems to be but one reference to Mexico (p. 8) and none to Central America. One may well wonder how the peoples of these latter regions may react should they have occasion to take note of this book, of course, inasmuch as it is written in English, few of their citizens are likely to come upon it.

Altho the book is a commendable piece of work, we cannot help but wonder about a few of its meteorological aspects. One can easily get the impression that the author has set as a major task for himself to prove that our weather fluctuates. In fact he says "Our American Weather is an attempt . . . to portray the changing, yet recurring, patterns of weather. . . ." Certainly most "American" readers will already have been familiar with the variability of our weather.

Dr. Kimble's British origin no doubt accounts for his frequent comparisons of American weather with that of the British Isles. Sometimes he points out contrasts which are hardly surprising in view of the differences in the nature of the two regions.

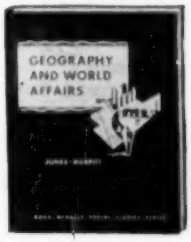
The index in "Our American Weather" should prove quite convenient for those who would use the book as a reference. Like the recent publication, "Sun, Sea, and Sky" by Krick and Fleming, Kimble's work brings a fresh approach to an old topic and by virtue of the author's training, reliability to his comments. We recommend it not only for individual ownership of those interested in the weather but for the libraries of high schools as well as universities.

EUGENE VAN CLEET

Ohio State University

A Challenging Book for Junior-Senior High Schools

GEOGRAPHY and WORLD AFFAIRS



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Edited by GEORGE W. HOFFMAN, *University of Texas*

Prepared by the Editor and Nine Contributing Authorities

THE FIRST GEOGRAPHY of Europe, in the English language, to be written by such a large number of European-trained specialists. A basic textbook for college courses, it provides the background in both the historical and physical geography necessary for an accurate appraisal of Europe today. Following a clear and simple plan, the book divides the continent into seven basic regions—each analyzed by an authority on the particular area covered—according to its political boundaries and the boundaries of natural regions and broad cultural areas. Seventy-three exceptionally fine maps reflect the authors' high standards of scholarship. Drawn by Vaughn Gray of the *New York Times*, they are closely correlated to the text. *159 ills., 30 tables, 775 pp.*

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GEOGRAPHICAL MATERIALS RECEIVED

Sarkis Atamian. **The Armenian Community.** Philosophical Library, New York, 1955. 479 pages with two maps, bibliography and index. $4.75.

An analytical study of the cultural development of the Armenians during the past century.

Mary Smith. **Baba of Karo—A Woman of the Muslim Hausa.** Philosophical Library, New York, 1955. 299 pages with notes by M. G. Smith, glossary and index. $7.50.

The intimate life story of a Muslim woman.

Wendell W. Williams. **Selected Films for World Understanding.** Indiana University Audio-Visual Center, Bloomington, 1955. 88 pages with topical and geographical classifications and directory of producers and distributors. $1.50.

Presents information on 381 films useful to high school, colleges and adult community groups.

Mildred Fisher Marple and Walter C. Brown. **Handbook for Teachers of Earth Science.** Information Circular No. 15, Division of Geological Survey, Ohio State University, Columbus, 1955. 61 pages with illustrations, tables, bibliography and glossary. 50 cents.

Presents background information on minerals and rocks and on the geologic history of Ohio, with a "how to do" section.

William A. Ritchie. **Recent Discoveries Suggesting an Early Woodland Burial Cult in the Northeast.** Circular 40, New York State Museum and Science Service, The University of the State of New York, Albany, 1955. 135 pages with illustrations, tables and bibliography. $1.25.

Based on the recent researches of the New York State Museum and Science Service and authored by the State Archeologist.

Marston Bates. **The Prevalence of People.** Charles Scribner's Sons, New York, 1955. 283 pages with references and index. $3.95.

A study of the human population problem from the standpoint of a biologist.

Janice Holland. **Pirates, Planters and Patriots, the Story of Charleston, South Carolina.** Charles Scribner's Sons, New York, 1955. 48 pages with illustrations. $2.50.

A picture book about Charleston for elementary children.

Pauline Smyth. **The Geology Along Route 40 in Ohio.** Information Circular No. 16, Division of Geological Survey, Ohio State University, Columbus, 1955. 65 pages with illustrations and maps. 25 cents.

Points out to the traveler along U. S. Route 40 some things about the past which the rocks and hills can tell.

A. J. Arkell. **A History of the Sudan to A.D. 1821.** John de Graff, Inc., New York and The Athlone Press, London, 1955. xviii and 249 pages with illustrations, bibliography and index. $4.00.

An account of the earlier civilizations that have flourished in that part of Africa now known as the Anglo-Egyptian Sudan.

Alan Paton. **The Land and People of South Africa.** J. B. Lippincott Co., Philadelphia, 1955. 143 pages with illustrations and index. $2.75.

The author was born and educated in Natal, South Africa but this popular book is written for American readers.

J. F. Kirkaldy. **General Principles of Geology.** Philosophical Library, Inc., New York, 1955. 327 pages with illustrations and index-glossary. $6.00.

An introduction to Geology with the "out-of-doors" used as a means of explaining the principles of geology.

Educators Guide to Free Slidefilms, Seventh Annual Edition, 1955. Educators Progress Service, Randolph, Wisconsin. vi and 185 pages. $5.00.

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EDITORIAL NOTES AND NEWS

Dr. Thomas F. Barton, Editor of the Journal, is now in Bangkok, Thailand. He is working with a commission from Indiana University under contract with the United States and Thailand governments on a program designed to organize and improve a four-year degree-granting college for the training of teachers. Dr. Barton expects to be back sometime next summer. He expects to do some work in Europe on his way back to this country.

Dr. George B. Cressey of Syracuse University left on August 5 for a year of research on water problems in Southwest Asia. Headquarters will be in Baghdad, Iraq, and he plans to travel widely. The program is financed by a Fulbright Research Award. En route, Professor Cressey attended the General Assembly of the International Council of Scientific Unions in Oslo, and a Conference on Tropical Africa in Uganda, sponsored by the International Geographical Union.

At the invitation of the Governor of Greenland, and thru the courtesy of the United States Air Force, Professor Trevor Lloyd of Dartmouth College was able to spend about four weeks in Greenland during the Christmas Season. Travelling by air from the United States to the Air Base Søndestrøm, he then flew over the ice-cap southward to a base at Narssarssuak, and thence went by boat along the coast to Godthaab, where he remained for some weeks. The return journey was by small boat southward from Godthaab to the same base and so to the United States by way of Newfoundland. The journey provided an excellent opportunity for Professor Lloyd to discuss the numerous changes taking place in Greenland with officials of the administration at the capitol, Godthaab. Now a town of more than 2,000 inhabitants, he found Godthaab to have changed even since his last visit in the 1951 summer. The most striking new feature is the 230-bed sanatorium for tuberculosis patients, perhaps the most modern of its kind in the world.

Have you seen one of the younger geography newsletters put out by the State Teachers College, Trenton, New Jersey? If interested, address your communication to Editor, New Jersey Newsletter.

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The conclusion that natural steam from hot springs in Mexico can undoubtedly be used to produce power for both industrial and domestic use has been reached by a United Nations technical assistance expert, just returned from a seven-week assignment in that country. The UN expert, Gunnar Bodvarsson, is a native of Iceland where the use of hot springs as a source of power has been highly developed. He is leaving New York on Saturday to return to Reykjavik where he is Chief Engineer to the Geothermal Department of Iceland's State Electricity Authority.

A geography—social studies unit on the new nation, Pakistan, appeared in the December, 1954 issue of *Pan American World Airways Teacher*. The regular contributors prepared this material—Enrique Portes and Lou A. Phillips for articles, Esther L. Berg for audio-visual aids and Curriculum Specialist Eugene G. Nadelman compiled the Suggestions for a Study Unit. If you are interested, write to Educational Director, Pan American World Airways, 28-19 Bridge Plaza North, Long Island City 1, New York.

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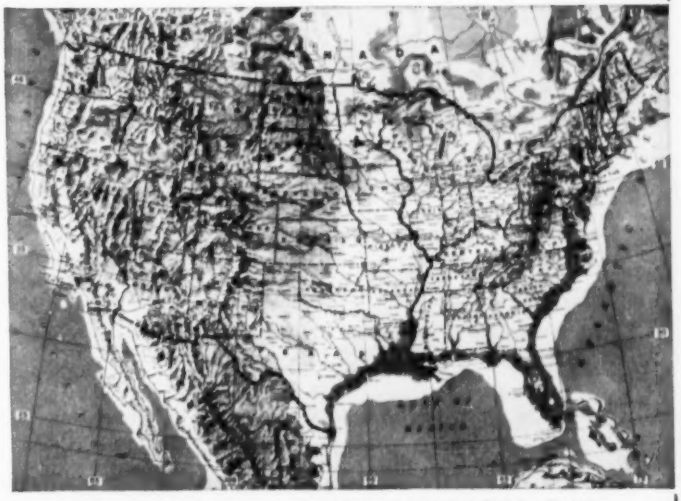

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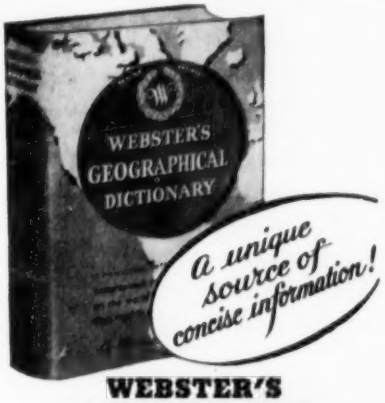

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